

AMENDMENTS TO THE CLAIMS

1. (Previously presented) A method for prophylaxis or treatment of a cancer in a mammal, wherein cancer cells of the cancer express a MAP kinase and the method comprises treating the mammal with an effective amount of a polypeptide that binds to a binding domain of the MAP kinase for a cytoplasmic binding domain of a β integrin subunit for the MAP kinase, and the β integrin subunit is essentially not expressed by the cancer cells.

2-85. (Cancelled)

86. (Previously presented) A method according to claim 1 wherein the polypeptide comprises the binding domain of the β integrin subunit for the MAP kinase.

87. (Previously presented) A method according to claim 1 wherein the polypeptide comprises a modified amino acid sequence compared to the binding domain of the β integrin subunit and the modified amino acid sequence has sufficient amino acid sequence homology with the binding domain of the β integrin subunit to bind to the binding domain of the MAP kinase.

88. (Currently amended) A method according to claim 87, [[3]] wherein the modified amino acid sequence comprises the binding domain of the β integrin subunit in which one or more amino acids in a linker region of the binding domain non-essential for the binding of the MAP kinase have been deleted.

89. (Currently amended) A method according to claim 88, [[4]] wherein the linker region of the binding domain has been deleted in the modified amino acid sequence.

90. (Currently amended) A method according to claim 88, [[4]] wherein the linker region binds opposite end regions of the binding domain of the β integrin subunit together and the end regions are unchanged in the modified amino acid sequence compared to the binding domain of the β integrin subunit.

91. (Currently amended) A method according to claim 88, [[4]] wherein the modified amino acid sequence has at least 50% overall amino acid sequence homology with the binding domain of the β integrin subunit.

92. (Previously presented) A method according to claim 1 wherein the polypeptide is selected from the group consisting of RSKAKWQTGTNPLYR (SEQ ID No: 4), RARAKWDTANNPLYK (SEQ ID No: 5), RSRARYEMASNPLYR (SEQ ID No: 6), RSKAKNPLYR (SEQ ID No: 7), RARAKNPLYK (SEQ ID No: 8), RSRARNPLYR (SEQ ID No: 9), KEKLKSQWNNDNPLFK (SEQ ID No: 11) and KEKLKNPLFK (SEQ ID No: 10).

93. (Previously presented) A method according to claim 1 wherein the polypeptide is coupled to a facilitator moiety that facilitates passage of the polypeptide across the outer cell membrane of the cancer cells.

94. (Currently amended) A method according to claim 93, wherein the facilitator moiety comprises a signal peptide, or a partial sequence or a modified form thereof.

95. (Currently amended) A method according to claim 94, [[10]] wherein the signal peptide is a signal peptide for a growth factor.

96. (Currently amended) A method according to claim 94, [[10]] wherein the signal peptide comprises the amino acid sequence AAVALLPAVLLALLA (SEQ ID No: 1).

97. (Currently amended) A method according to claim 94, [[10]] wherein the signal peptide comprises the amino acid sequence AAVALLPAVLLALLAP (SEQ ID No: 3).

98. (Previously presented) A method according to claim 1 wherein the polypeptide has a length of greater than 5, and up to 15, amino acids.

99. (Currently amended) A method according to claim 98, [[14]] wherein the polypeptide has a length of from 10 to 15 amino acids.

100. (Currently amended) A method according to claim [[s]] 1, wherein the β integrin subunit is selected from the group consisting of β 2, β 3, β 5 and β 6.

101. (Currently amended) A method according to claim 100 ~~[[16]]~~, wherein the β integrin subunit is $\beta 6$.

102. (Previously presented) A method according to claim 1 wherein the MAP kinase is selected from the group consisting of extracellular signal-regulated kinases (ERKs).

103. (Currently amended) A method according to claim 102, ~~[[18]]~~ wherein the MAP kinase is ERK2.

104. (Previously presented) A method according to claim 1 wherein the polypeptide is administered subcutaneously to the mammal for contact with the cancer cells at a site remote from the site of administration of the polypeptide.

105. (Previously presented) A method according to claim 1 wherein the cancer is selected from the group consisting of epithelial cell cancers, prostate cancer, lymphomas, blood cell cancers, leukemias, and cancer of the liver, tongue, salivary glands, gums, floor and other areas of the mouth, oropharynx, nasopharynx, hypopharynx and other oral cavities, oesophagus, gastrointestinal tract, stomach, small intestine, duodenum, colon, rectum, gallbladder, pancreas, larynx, trachea, bronchus, lung, breast, uterus, cervix, ovary, vagina, vulva, prostate, testes, penis, bladder, kidney, thyroid, and skin.

106. (Currently amended) A method according to claim ~~[[s]]~~ 1, wherein the cancer is an epithelial cell cancer.

107. (Currently amended) A method according to claim 106, ~~[[9]]~~ wherein the polypeptide has a length of greater than 5, and up to 15, amino acids.